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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,692	10/22/2003	Yung Yung Sun	MR1683-508	4661
4586	7590	12/28/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043				MULLER, BRYAN R
ART UNIT		PAPER NUMBER		
3723				

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/689,692	SUN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bryan R Muller	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 October 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3 is/are rejected.  
 7) Claim(s) 2 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Specification***

1. The abstract of the disclosure is objected to because of minor formalities: The occurrence of the word "blots" on page 2, line 14 should be changed to "bolts", in figure 6, number "81" is shown but is not discussed in the spec and the section of line 23 on page 4 that reads, "rotate the locking to make" should say "rotate the locking member to make". Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

2. Claim 2 is objected to because of the following informalities: line 2 of claim 2 reads "wherein the locking comprises" should say, "wherein the locking member comprises". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

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The applicant neither discloses in the claims or the specification, how the series of indentations defined in the outer periphery of the second skirt would be used to allow the user to easily mount the locking member to the housing. Thus, the application fails to describe how the invention may be made and/or used to one of ordinary skill in the art.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lung (6,264,408) in view of Garcia et al (6,213,851).

7. Lung discloses a pneumatic handheld grinding apparatus comprising: a housing (1) including a cavity longitudinally defined therein for receiving a motor set and a threaded portion (12) formed on an inner periphery of the cavity near a bottom of the housing, a joint laterally (shown at top of figures 1 and 2) extending from the housing and adapted to be connected to a compressed air source, a valve mounted in the joint (not shown but must be provided for pneumatic tool to function) for selectively allowing the compressed air flowing into the housing to operate the motor set, a lever (13) pivotally mounted to the joint for actuating the valve; the motor set including a motor

(19) received in the cavity and having a shaft (14) longitudinally extending from the motor, a connector securely mounted to a free end of the shaft and a grinding disk (or member; line 2 of abstract) attached to the connector so that the grinding disk is rotated when the compressed air flows into the housing and operates the motor; and a locking member (2) securely mounted to the housing to hold the motor set in place, the locking member including a through hole (21) centrally defined therein to allow the connector and the shaft of the motor set extending through the locking member when the locking member is mounted to the housing, a first skirt (22) upwardly extending from the locking member and having a threaded outer periphery (221) screwed onto the threaded portion of the housing and a top portion securely abutting the motor to hold motor set in place after the locking member screwed onto the housing. Lung however fails to disclose that the connector is eccentrically and securely mounted to a free end of the shaft. Garcia teaches that one advantage of hand-held eccentric orbit sanding and grinding apparatuses is that the combined rotational/orbital motion will decrease the tendency for a point on the grinding surface to move in a repeat pattern that may mar the surface of the work piece (col. 6, lines 22-31). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to provide a connector to the invention of Lung that would connect eccentrically mount to the free end of the shaft and receive a grinding disk that would thus, be rotated rotationally and orbitally in order to prevent marring or further damage to a work piece.

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8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lung (6,264,408) and Garcia et al (6,213,851) further in view of Buser (5,125,190).

9. The obvious combination of Lung and Garcia as discussed supra, provides for the pneumatic handheld grinding apparatus as disclosed in claim 1 and Lung further discloses that the locking member comprises a second skirt (23) downward extending therefrom, the second skirt including an annular rib laterally outwardly extending from an outer periphery of the second skirt and multiple covers and guards that may be attached to the second skirt and engaged to the annular rib to prevent the cover or guard from detaching from the locking member. Lung, however, does not disclose that a dust proof cover that may be attached to the second skirt. Buser discloses a dust collector for rotary grinders that is oriented so that it may be attached to the grinding tool of Lung and Buser teaches that the dust collector shields against particles being radiated at high speeds and also contains the air with contaminating dust in its restricted passage (abstract) in order to protect the user of the grinder as well as others in the immediate area from pieces of the grinding pad or work piece being thrown from the grinder and from inhaling dust that may be harmful to ones health (col. 1, lines 16-19 and 41-45). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to provide the grinding tool of Lung with a dust proof cover in order to protect the user of the grinder as well as others in the immediate area from pieces of the grinding pad or work piece being thrown from the grinder and from inhaling dust that may be harmful to ones health.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yang (5,775,981) discloses an air die grinder that is similar to the pneumatic tool disclosed by Lung and Wallace (4,467,565), Huber (5,319,888 and 4,854,085 and 6,328,643), Tseng (6,447,387) and Sun (5,879,228) all disclose pneumatic hand held grinders with grinding discs eccentrically mounted on the driving shaft and all have a joint laterally extending from the housing and adapted to be connected to a compressed air source, a valve mounted in the joint for selectively allowing the compressed air flowing into the housing to operate the motor set and a lever pivotally mounted to the joint for actuating the valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan R Muller whose telephone number is (703)305-0487. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J Hail III can be reached on (703)308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BRM BQM  
12/16/2004



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